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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,888	12/15/2003	Steven Clay Moore		1017
7590	01/21/2005		EXAMINER	
Steven Clay Moore 8211 Long Canyon Drive Austin, TX 78730			WRIGHT, ANDREW D	
		ART UNIT	PAPER NUMBER	
		3617		

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Pn

Office Action Summary	Application No.	Applicant(s)
	10/734,888	MOORE, STEVEN CLAY
Examiner	Art Unit	
Andrew Wright	3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 18 October 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-4,8-10 and 17-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4,8,9,17-22,24-38 and 40-42 is/are rejected.
- 7) Claim(s) 10,23 and 39 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
- Certified copies of the priority documents have been received.
 - Certified copies of the priority documents have been received in Application No. _____.
 - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Drawings

1. The drawings were received on 10/18/04. These drawings are acceptable.
2. The drawing objections from the previous Office Action are withdrawn in view of the drawing correction and applicant's Remarks of 10/18/04.
3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the front edge of the plate raised out of the body of water (claim 27) must be shown or the feature(s) canceled from the claim(s). Furthermore, the plate incorporated with a bait tank, swim platform, ladder, and motor mount (claim 42) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 1 and 2 are objected to. Claim 1 recites "the stern". Claim 2 then subsequently recites "a stern". The positive recitation should appear first. Appropriate correction is required.
6. Claims 9 and 10 are objected to. The word "the" or "said" should appear before "non-rigid joints" in line 3 of claim 9 and line 3 of claim 10 (similar to how the word "the" precedes "rotating joints" in line 7 of claim 10). Appropriate correction is required.
7. Claim 22 is objected to. The comma after "curved" in line 1 should be omitted. Appropriate correction is required.

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8. Claim 23 is objected to. The recitation "the curved, wake control plate" lacks antecedent basis in the claims. It will be assumed that claim 23 depends from claim 22, as similar claim 39 depends from claim 38.

9. Claim 36 is objected to. The recitation "the first arm" lacks antecedent basis in the claims. It will be assumed that the recitation is "the one or more arms". Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claim 42 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 42 recites a watercraft, one or more arms, a plate, and a driver, where "the plate is incorporated with a bait tank, swim platform, ladder, or motor mount. This is not sufficiently described. The specification does not mention and the drawings do not show any of a bait tank, swim platform, ladder, or motor mount.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-4, 8, 17, 19, 21, 33, 34, 35, 37, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Finkl (US 5,315,951). Finkl shows an apparatus comprising an adjustable length rod (22 and 24) and a plate (12). The plate is attached to the watercraft by the rod. The plate front edge can be positioned below the portion of the stern that is directly in front of the plate (similar to what is shown in figures 5 and 6C of the instant application). The plate can be inclined at an angle so as to scoop water upward (fig 5). Finkl teaches that this produces a force that raises the bow and lowers the stern (column 3, lines 6-8).

14. It is noted that the recitation "so as to scoop water upward to produce a negative lift to force the stern of the watercraft into a body of water to increase the size of the wake created by the watercraft" is an intended use recitation. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA

1963). The prior art need not teach, suggest, or even contemplate the intended use. It is enough that the prior art is theoretically capable of performing the function. In this case Finkl explicitly teaches that the orientation of the plate (12) as shown in figure 5 will produce a negative lift on the stern to lower the stern in the water. Through such lowering of the stern, the apparatus is capable of increasing the size of the wake.

15. Regarding claim 2, the rod is connected at least indirectly to the stern of the watercraft. The rod can hold the plate such that the front edge is in the body of water.

16. Claim 3, the rod is adjustable through hydraulic power assistance.

17. Claim 4, the hydraulic cylinder is manually controlled by the pilot of the boat.

18. Claim 8, mounting bracket (26) is a fixed length connection. The plate can be completely submersed. Each plate can be independently controlled.

19. Claim 17, Finkl shows a plate and an arm. The arm is coupled to the plate. The arm has an adjustable length. The arm can position the front edge of the plate into the body of water to scoop water to produce a negative lift on the stern (fig 5). The apparatus is capable of increasing the size of the boat wake.

20. Claim 19, the adjustable length arm comprises first arm (22) that couples to the back of the plate via leg (17B). The first arm (22) has an adjustable length such that the angle of the plate with respect to the transom can be adjusted.

21. Claim 21, the plate (12) is flat.

22. Claim 33, Finkle shows a boat (10), arm (22), plate (12), and driver (24). The arm is pivotally coupled to the water craft via driver (24) and bracket (26). The plate is

couple with the arm. The driver is coupled with the arm to adjust the length of the arm. The apparatus is capable of performing the recited intended use.

23. Claim 35, the arm (22) is a first arm.

24. Claim 37, the plate is flat.

25. Claim 41, another plate is shown.

26. Claims 1-3, 17, 19, 21, 24, 33, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Bue (US 3,391,667). Regarding claim 8, Bue shows an apparatus comprising a rod (16), connection (15), and plate (4). The rod is adjustable length. The connection is a bracket that is fixed length. The rod and connection are attached at the stern of the boat. The connection is one link in a chain of elements that link the plate to the boat. As such, the plate is coupled with the boat via the connection. Various portions of the plate can be positioned in the water by the rod (fig 2). With the front edge raised, the plate will cause the raising of the stern and lowering of the bow. With the front edge lowered, the plate will cause the raising of the bow and the lowering of the stern (column 3, lines 8-15). At least the front edge of the plate is necessarily capable of being submersed below the stern to achieve this explicitly taught functionality. (The claim does not recite that the entire plate is submersed.) The plates can be controlled independently of each other (one can be raised while the other is lowered to achieve a turning effect).

27. It is noted that the recitations "can be positioned...", "can be submersed...", and "can be controlled independently to produce negative lift..." are intended use recitations.

A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). The prior art need not teach, suggest, or even contemplate the intended use. It is enough that the prior art is theoretically capable of performing the function. In this case, the Bue plate is capable of being positioned with the front edge down and the back edge up (see figure 2 and lines 8-15 of column 3). Thus the Bue apparatus is capable of performing the recited functions.

28. Regarding claim 9, Bue shows that the rod (16) is connected to the plate by a ball joint and to the bracket by a universal joint.

29. Regarding claim 17, Bue shows a plate and an adjustable length arm. The Bue apparatus is capable of performing the intended use.

30. Regarding claim 24, Bue shows upturned walls (5) at the edges of the plate. These walls prevent water from flowing over the sides of the plate. The walls are theoretically capable of accumulating water on the plate, if only for a very short amount of time.

31. Regarding claim 33, Bue shows a boat (3), an adjustable length arm (16), a plate (4), and a driver (14). The apparatus is capable of performing the intended use of

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moving the front edge of the plate into the water to scoop water, to produce negative lift, to lower the stern, and to adjust the size of the wake.

32. Claim 34, the plate (4) is coupled to the arm by ball-and-socket joint (22). The ball and socket joint is necessarily non-rigid. The ball and socket joint has angular flexibility in a plane parallel to a plane of the surface of the body of water.

33. Claim 40, Bue shows upturned walls (5) at the edges of the plate. These walls prevent water from flowing over the sides of the plate. The walls are theoretically capable of accumulating water on the plate, if only for a very short amount of time.

34. Bue (US 3,391,667) is used primarily to show the elements of claims 9, 24, 34, and 40. Bue, as described above with respect to claims 9, 24, 34, and 40, also anticipates claims 1-3, 19, 21, 35, 37, and 41.

35. Claims 1-3, 8, 17, 18, 33, 35, 36, 37, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Donnell (US 4,967,682). Regarding claim 17, O'Donnell shows a boat (10) with transom (11). Arm (27) is pivotally coupled to the boat at pin (22). Arm is extendable in length in and out of cylinder (26). Plate (15) is coupled with the arm. The plate is capable of scooping water (fig 3). The apparatus is capable of performing the intended use of producing negative lift, lowering the stern, and increasing the size of the wake.

36. Claim 18, the plate (15) is coupled to the arm (27) via hinge joint (23). The hinge is non-rigid in that it allows at least one degree of freedom (rotation about the axis of pin (23)). Looking at figure 3 of O'Donnell, a first plane can be defined that extends

perpendicularly into and out of the paper and also runs along the length of the arm (27). This plane contains the adjustable length arm, and therefore is a "plane of the adjustable length". A second plane can be defined as the plane of the paper itself. This second plane is perpendicular to the first plane. The hinge joint has angular flexibility in the second plane.

37. Claim 20, the arm is capable of a length where the front edge of the plate is even with the bottom of the stern (fig 2). A second arm (27) attached to the same plate can force the back edge of the plate below the front edge (figs 4 and 5) where the plate acts as a trim tab.

38. Regarding claim 33, O'Donnell shows a boat (10) with transom (11). Arm (27) is pivotally coupled to the boat at pin (22). Arm is extendable in length in and out of cylinder (26). Plate (15) is coupled with the arm. The plate is capable of scooping water (fig 3). Cylinder (26) is a driver that adjusts the length of the arm. The apparatus is capable of performing the intended use of producing negative lift, lowering the stern, and adjusting the size of the wake.

39. Claim 36, the arm is capable of a length where the front edge of the plate is even with the bottom of the stern (fig 2). A second arm (27) attached to the same plate can force the back edge of the plate below the front edge (figs 4 and 5) where the plate acts as a trim tab.

40. O'Donnell (US 4,967,682) is used primarily to show the elements of claims 18, 20, and 36. O'Donnell, as described above with respect to claims 18, 20, and 36, also anticipates claims 1-3, 8, 35, 37, and 41.

41. Claims 1-3, 8, 17, 19, 21, 22, 33, 35, 37, 38, and 42 rejected under 35 U.S.C. 102(b) as being anticipated by Castillo (US 5,860,384). Regarding claim 17, Castillo shows a plate (30) and an adjustable length arm (52). The apparatus is capable of performing the intended use. Castillo explicitly teaches that movement of the plate aft (fig 5) causes the aft end of the watercraft to be drawn downwardly into the water to increase the level of the wake produced thereby (see the abstract).

42. Regarding claim 22, the plate comprises a curve.

43. Regarding claim 33, Castillo shows a boat (10), arm (52), plate (30), and driver (48). The apparatus is capable of performing the intended use.

44. Regarding claim 38, the plate comprises a curve.

45. Regarding claim 42, the plate could be used as a swim platform.

46. Castillo (US 5,860,384) is used primarily to show the elements of claims 22, 38, and 42. Castillo clearly anticipates claims 1-3, 8, 17, 19, 21, 33, 35, and 37.

Claim Rejections - 35 USC § 103

47. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

48. Claims 25-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Donnell (US 4,967,682). O'Donnell shows an apparatus comprising a boat, adjustable length arm, and plate. Extending the front arm (20) causes the front edge of the plate to be lowered (fig 3). Shortening the length of the front arm (20) raises the front edge of the plate out of the water (fig 4). O'Donnell does not explicitly disclose the recited method steps. The method steps, however, are inherent in the use of the O'Donnell system. Using the O'Donnell system and placing the plate in the position shown in figure 3 necessarily includes the step of adjusting the length of the front arm and lowering the front edge of the plate. Lowering the front edge of the plate, in turn, necessarily performs the functions of scooping water over the plate, creating a negative lift, transmitting that negative lift to the arm and then to the stern, thereby lowering the stern and adjusting the size of the wake. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to devise the recited method steps. The motivation would be to make and use the O'Donnell system as shown in figure 3.

49. Claim 26, the actuator is hydraulic.

50. Claim 27, shortening the front arm raises the front edge.

51. Claim 28, adjusting the tilt of the plate inherently adjusts the magnitude of negative lift.

52. Claim 29, the plate (15) is coupled to the arm (20) via hinge joint (23). The hinge is non-rigid in that it allows at least one degree of freedom (rotation about the axis of pin (23)). Looking at figure 3 of O'Donnell, a first plane can be defined that extends

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perpendicularly into and out of the paper and also runs along the length of the arm (20). This plane contains the adjustable length arm, and therefore is a "plane of the length of the arm to increase". A second plane can be defined as the plane of the paper itself. This second plane is perpendicular to the first plane. The hinge joint has angular flexibility in the second plane.

53. Claim 30, O'Donnell shows a second plate and respective arm. The two plates can move independently of each other.

54. Claim 31, the turbulent flow of water traveling over the top of the plate inherently results in small accumulations on the top of the plate, even if only extremely small in magnitude and for an extremely short amount of time.

55. Claim 32, the negative lift is inherently transmitted to the stern of the watercraft.

Allowable Subject Matter

56. Claims 10, 23, and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

57. Applicant's arguments with respect to claims 1-4, 8-10, and 17-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

58. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

59. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number (703) 308-6841. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at (703) 308-0230. The fax number for official communications is 703-872-9306. The fax number directly to the examiner for unofficial communications is 703-746-3548.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright
Patent Examiner
Art Unit 3617

An 11/6/05
ANDREW D. WRIGHT
PRIMARY EXAMINER